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EXAMINER

GOFF II, JOHN L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This action is in response to the amendments filed on 9/25/08 and 12/1/08.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sjoberg et al. (WO 02/47906) in view of either JP 01310058 (see also the abstracts) or JP 02299842 (see also the abstract), Breitscheidel et al. (U.S. Patent 4,882,208), and Moebus (WO 01/21366 and see also English equivalent U.S. Patent 6,761,961).

Sjoberg discloses a method of manufacturing a decorative laminate used for floor coverings comprising providing a carrying core layer, e.g. fiber board, providing a dampening (e.g. acoustic dampening) foil layer of a thermoplastic polyolefin elastomer on the upper side of the core layer, providing an uppermost visible decorative and abrasion resistant thermosetting laminate layer on the foil layer, and then pressing to form the decorative laminate (Page 1, lines 17-26 and Page 2, lines 12-14). Sjoberg is silent as to the lower visible surface below the core layer consisting of a balance layer. It was known to provide in a decorative laminate as the lower visible surface beneath the carrying core layer (1 of Figure 3 of JP 01310058 and 1 of Figure 1 of JP 02299842) a balance layer (5 of Figure 3 of JP 01310058 and 3 of Figure 1 of JP 02299842) consisting of ethylene foaming material, e.g. considered conventionally polyethylene and a foaming agent, to provide improved cushioning as shown by JP 01310058 (See the

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abstracts and 5 of Figure 3) or a closed cell foam to prevent warping of the laminate and provide improved cushioning as shown by JP 02299842 (See the abstract and 3 of Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include beneath the core layer prior to pressing in the method taught by Sjoberg a balance layer as shown by either one of JP 0130058 or JP 02299842 to prevent warping of the laminate and provide improved cushioning.

Sjoberg as modified by either one of JP 0130058 or JP 02299842 do not specifically describe the balance layer as consisting of an expanded physically cross-linked polyolefin with closed cells, it being noted JP 0130058 describes the balance layer as consisting of ethylene foaming material considered expanded polyolefin and JP 02299842 describes the balance layer as consisting of closed cell foam considered expanded closed cell foam wherein neither JP 0130058 or JP 02299842 teach away from expanded physically cross-linked polyolefin with closed cells rather the references are merely silent as to all the particulars. Breitscheidel is exemplary of the use of closed cell polyolefin foam material as cushioning for flooring wherein the foam is expressly described as expanded physically cross-linked polyethylene foam with closed cells which foam has low weight per unit area, low water absorbency, and low expense (Column 1, lines 42-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the specific ethylene foaming material or closed cell foam taught by Sjoberg as modified by JP 0130058 or JP 02299842 the expanded physically cross-linked polyethylene foam with closed cells shown by Breitscheidel known for use as cushioning for flooring and having low weight per unit area, low water absorbency, and low expense.

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Sjoberg does not specifically teach the decorative laminate is cut into panels and provided with edges intended for joining, it being noted Sjoberg teaches the decorative laminate is used for floor coverings (Page 1, lines 6-8). Moebus discloses a method of manufacturing a decorative laminate used for floor coverings comprising providing a carrying core layer, providing an upper decorative and abrasion resistant laminate layer on the upper side of the core layer, pressing to form the decorative laminate, and then cutting the decorative laminate into panels and milling edges on the cut panels intended for joining together as a floor covering (Column 1, lines 15-47 of U.S. Patent 6,761,961). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Sjoberg the well known finishing steps for forming decorative laminates into floor coverings of cutting the decorative laminate into panels and milling edges on the cut panels intended for joining as shown for example by Moebus wherein only the expected results would be achieved.

Regarding claims 2, 10-12, 37, 38, 46, 47, 50, 54, and 55, Sjoberg further teaches the decorative and abrasion resistant laminate is formed by providing one or more underlay papers impregnated with phenol-formaldehyde resin, providing on the underlay papers one or more décor papers impregnated with melamine-formaldehyde resin, providing on the décor papers one or more overlay sheets impregnated with melamine-formaldehyde resin and hard particles such as silicon oxide, aluminum oxide, silicon carbide, etc. having an average size of 5 - 60 μm , and laminating the papers together under increased heat and pressure to form the upper decorative and abrasion resistant laminate having a thickness of 0.3 - 0.9 mm and a density of 1250 - 1500 kg/m^3 (Page 1, lines 27-28 and Page 2, lines 1-11).

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Regarding claims 14-16, 40-42, 48, 49, and 51-53, JP 0130058 and JP 02299842 teach the balance layer has a thickness in the range of 0.1-5 mm, and Breitscheidel teaches the foam has a density in the range of 50 to 400 kg/m³. Further, as noted above Sjoberg teaches including a dampening foil of a thermoplastic elastomer which dampening foil consists of an expanded physically cross-linked polyolefin with closed cells and is considered similar to the balance layer taught by Sjoberg as modified by either one of JP 0130058 or JP 02299842 and Breitscheidel. Sjoberg teaches the dampening foil has an elasticity compression coefficient of 0.8 - 2.0 Mpa, a thickness of 0.1 - 0.5 mm, and a density of 180 - 330 kg/m³ (Page 2, lines 15-22). Absent any unexpected results, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the thickness, density, and elasticity compression coefficient of the balance layer as taught by Sjoberg as modified by either one of JP 0130058 or JP 02299842 and Breitscheidel for example by using any of the values with the ranges disclosed by JP 0130058, JP 02299842, or Breitscheidel or by using the properties of a similar layer within the laminate such as the dampening foil as a function of providing a balance layer that prevents the decorative laminate from warping and provides cushioning.

Regarding claims 17, 30-32, 43-45, and 64, Sjoberg teaches the upper decorative and abrasion resistant laminate, dampening foil, and carrying core layer are joined by means of melt-glue, heat, and pressure wherein it is considered obvious to join the balance layer to the core layer as taught by Sjoberg as modified by either one of JP 0130058 or JP 02299842 by the same only the expected results being achieved.

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4. Claims 24-26, 29, 33-36, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sjoberg, either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 63, and 64 above, and further in view of Leukel et al. (U.S. Patent 4,770,916).

Sjoberg, either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus as applied above teach all of the limitations in claims 24-26, 29, 33-36, and 65 except for a teaching of including a conductive material such as carbon black or carbon fiber in the glue and elastomer layers. Leukel discloses a floor covering including rubber and glue layers wherein the layers include a conductive material such as carbon black or carbon fiber (conductivity greater than 500 k Ω cm) to impart static dissipating properties to the floor covering (Column 3, lines 5-9 and 36-49 and Column 4, lines 59-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in all of the glue and elastomer layers of Sjoberg as modified by either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus a conductive material such as carbon black or carbon fiber to impart static dissipating properties to the entire decorative laminate floor covering as shown by Leukel.

5. Claims 24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sjoberg, either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 63, and 64 above, and further in view of Nowell et al. (U.S. Patent 4,885,659).

Sjoberg, either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus as applied above teach all of the limitations in claims 24, 27-29, and 65 except for a teaching of including a conductive material such as a vacuum metallized aluminum layer in the balance

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layer. Nowell discloses a floor covering including a thermoplastic layer wherein the thermoplastic layer includes a conductive material such as a vacuum metallized aluminum layer (conductivity greater than 500 kΩcm) to impart static dissipating properties to the floor covering (Column 2, lines 3-18 and Column 4, lines 18-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the each of the thermoplastic layers of Sjoberg as modified by either one of JP 01310058 or JP 02299842, Breitscheidel, and Moebus a conductive material such as a vacuum metallized aluminum layer to impart static dissipating properties to the entire decorative laminate floor covering as shown by Nowell.

6. Claims 1, 2, 10-12, 14-17, 30, 31, 37, 38, 46-50, 54, 55, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 0130058 in view of Sjoberg, Breitscheidel, and Moebus.

JP 0130058 discloses a method of manufacturing a decorative laminate used for floor coverings comprising providing a carrying core layer (1 of Figure 3) wherein the upper side of the core is provided with a decorative and abrasion resistant thermosetting laminate (2 and 3 of Figure 3) and that below the lower side of the core consists of a balance layer (5 of Figure 3) consisting of ethylene foaming material considered a thermoplastic elastomer, e.g. conventionally polyethylene and a foaming agent, having the purpose of cushioning, acoustic dampening, and also considered to prevent warping of the decorative laminate (See abstracts).

JP 0130058 is silent as to the specific material of the carrying core. Sjoberg directed similarly to decorative laminate used for floor coverings fully described above teach the carrying core comprises fiber board. It would have been obvious to one of ordinary skill in the art at the

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time the invention was made to use as the carrying core in JP 0130058 those materials known as useful and suitable in the art such as fiber board as shown by Sjoberg only the expected results being achieved.

JP 0130058 does not specifically describe the balance layer as consisting of an expanded physically cross-linked polyolefin with closed cells, it being noted JP 0130058 describes the balance layer as consisting of ethylene foaming material considered expanded polyolefin wherein JP 0130058 does not teach away from using expanded physically cross-linked polyolefin with closed cells rather JP 0130058 is merely silent as to all the particulars.

Breitscheidel is exemplary of the use of ethylene foam material as cushioning for flooring wherein the foam is expressly described as expanded physically cross-linked polyethylene foam with closed cells which foam has low weight per unit area, low water absorbency, and low expense. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the specific ethylene foaming material taught by JP 0130058 the expanded physically cross-linked polyethylene foam with closed cells shown by Breitscheidel known for use as cushioning for flooring and having low weight per unit area, low water absorbency, and low expense.

JP 0130058 does not specifically teach the decorative laminate used for floor coverings is cut into panels and provided with edges intended for joining. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in JP 0130058 the well known finishing steps for forming decorative laminates into floor coverings of cutting the decorative laminate into panels and milling edges on the cut panels intended for joining as shown for example by Moebus wherein only the expected results would be achieved.

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Regarding claims 2, 10-12, 37, 38, 46, 47, 50, 54, and 55, JP 0130058 is silent as to the specifics of the upper decorative and abrasion resistant laminate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the specific upper laminate taught by JP 0130058 the known laminate specifically shown by Sjoberg having suitable decorative and abrasion resistant properties.

Regarding claims 14-16, 48, and 49, JP 0130058 teaches the balance layer has a thickness in the range of 0.1-5 mm, and Breitscheidel teaches the foam has a density in the range of 50 to 400 kg/m³. Further, as noted above Sjoberg teaches including a dampening foil of a thermoplastic elastomer which dampening foil consists of an expanded physically cross-linked polyolefin with closed cells and is considered similar to the balance layer taught by JP 0130058 as modified by Breitscheidel. Sjoberg teaches the dampening foil has an elasticity compression coefficient of 0.8 - 2.0 Mpa, a thickness of 0.1 - 0.5 mm, and a density of 180 - 330 kg/m³ (Page 2, lines 15-22). Absent any unexpected results, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the thickness, density, and elasticity compression coefficient of the balance layer as taught by JP 0130058 as modified by Breitscheidel for example by using any of the values within the ranges disclosed by J 0130058 or Breitscheidel and by using the properties of a similar layer within the laminate such as a dampening foil as a function of providing a balance layer that provides acoustic dampening.

Regarding claims 17, 30, 31, and 64, JP 0130058 is silent as to how the layers of the laminate are joined. It would have been obvious to one of ordinary skill in the art at the time the invention was made to join the layers taught by JP 0130058 by means of melt-glue, heat, and pressure as shown by Sjoberg only the expected results being achieved.

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7. Claims 24-26, 29, 33-36, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 0130058, Sjoberg, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30, 31, 37, 38, 46-50, 54, 55, and 64 above, and further in view of Leukel.

JP 0130058, Sjoberg, Breitscheidel, and Moebus as applied above teach all of the limitations in claims 24-26, 29, 33-36, and 65 except for a teaching of including a conductive material such as carbon black or carbon fiber in the glue and elastomer layers. Leukel discloses a floor covering including rubber and glue layers wherein the layers include a conductive material such as carbon black or carbon fiber (conductivity greater than 500 kΩcm) to impart static dissipating properties to the floor covering. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in all of the glue and elastomer layers of JP 0130058 as modified by Sjoberg, Breitscheidel, and Moebus a conductive material such as carbon black or carbon fiber to impart static dissipating properties to the entire decorative laminate floor covering as shown by Leukel.

8. Claims 24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 0130058, Sjoberg, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30, 31, 37, 38, 46-50, 54, 55, and 64 above, and further in view of Nowell.

JP 0130058, Sjoberg, Breitscheidel, and Moebus as applied above teach all of the limitations in claims 24, 27-29, and 65 except for a teaching of including a conductive material such as a vacuum metallized aluminum layer in the balance layer. Nowell discloses a floor covering including a thermoplastic layer wherein the thermoplastic layer includes a conductive material such as a vacuum metallized aluminum layer (conductivity greater than 500 kΩcm) to impart static dissipating properties to the floor covering. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to include in the thermoplastic layers of JP 0130058 as modified by Sjoberg, Breitscheidel, and Moebus a conductive material such as a vacuum metallized aluminum layer to impart static dissipating properties to the entire decorative laminate floor covering as shown by Nowell.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 59, 63, and 64 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497 in view of either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497 disclose the invention substantially as claimed except for

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teaching of including a balance layer consisting of an expanded physically cross-linked polyolefin with closed cells as the visible surface beneath the core layer and cutting the decorative laminate into panels and providing the panels with edges intended for joining which would have been obvious in view of either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus as discussed above.

This is a provisional obviousness-type double patenting rejection.

11. Claims 24-26, 29, 33-36, and 65 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497, either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 59, 63, and 64 above, and further in view of Leukel. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497, either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus disclose the invention substantially as claimed except for a teaching of including a conductive material in the glue and elastomer layer which would have been obvious in view of Leukel as discussed above.

This is a provisional obviousness-type double patenting rejection.

12. Claims 24 and 27-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497, either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus as applied to claims 1, 2, 10-12, 14-17, 30-32, 37, 38, 40-55, 59, 63, and 64 above, and further in view of Nowell. Although the conflicting claims are not identical, they are not

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patentably distinct from each other because claims 1, 2, 5-7, and 9-25 of copending Application No. 11/129,497, either one of JP 0130058 or JP 02299842, Breitscheidel, and Moebus disclose the invention substantially as claimed except for a teaching of including a conductive material in the thermoplastic layer which would have been obvious in view of Nowell as discussed above.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

13. Applicant's arguments with respect to claims 1, 2, 10-12, 14-17, 24-38, 40-55, and 63-65 have been considered but are moot in view of the new ground(s) of rejection.

In view of applicants amendment the previous 35 USC 112 rejections have been overcome. In view of applicants amendment the previous rejections over Min (U.S. Patent 6,093,473) are withdrawn. The new limitations are fully addressed in the rejections above.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571)272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John L. Goff/
Primary Examiner, Art Unit 1791